(19)Korea patent office(KR)
(12)Opening patent official report(A)
(11) Public number 1997 – 0022058
(43) Disclosure plat 28 . 05 . 1997
(21) Application number 1995 - 0036402
(22) Application date 20 . 10 . 1995

(54) The refrigerating system which and uses a mixed-refrigerant with mixed-refrigerant.

Abstract

The present invention is the thing about the refrigerating system using the refrigerant road and suction line heat exchanger the Non-Azeotropic Regrigerant Mixtures and non azeotropic mixture described in the above as pentafluoroethane 20 ~ 65 %, and 1 , 1 , 1 , 2 - tetrafluoro ethane 30 ~ 75 % and C 3 hydrocarbon 5 ~ 15 %.

It has the effect that in the present invention, C 3 hydrocarbon is excellent in the refrigerator in which the ozone depletion functionality does not have the mixed-refrigerant of the present invention at all and using the suction line heat exchanger in the propane, and the Propylene middle or the cyclopropane as the moss godin thing as the substitute refrigerant of the preexistence R - 22 in the cooling volumetric capacity side of the coefficient of performance compresso.

Representative
Drawing 1
Specification.
[The name of an invention]
The refrigerating system which and uses Non-Azeotropic Regrigerant Mixtures with Non-Azeotropic Regrigerant Mixtures

[The simple description of the drawing]

The air-conditioner, which the drawing uses the suction tube suction line heat exchanger (SLHX) proposed in an invention with 1 in other words, the configuration of the heat pump.

The comparison which the drawing compares with 2 in case of not using the frozen property coefficient (COP) of the proposed pure refrigerants as R - 22 and R - 22 substitute refrigerant with the case of using SLHX

The comparison which the drawing compares with 3 in case of not using the cooling volumetric capacity (VC) of the compressor of the proposed pure refrigerants as R - 22 substitute refrigerant with case of using SLHX.

The example diagram which the drawing compares with 5 in case of not using a cyclopropane, and the frozen property coefficient (COP) of containing Non-Azeotropic Regrigerant Mixtures with the case of using SLHX

The comparison which the drawing compares the compressor cooling volumetric capacity (VC) of propylene containing Non-Azeotropic Regrigerant Mixtures with 9 in case of not allowing SLHX with the case of using.

The 10 drawing is the laziness field diagram the gliding temperature difference (GTD) in the SLHX use of propane containing Non-Azeotropic Regrigerant Mixtures.

A content did not give mention of the technical content since being the waist disclosure.

(57) The range of a demand

Claim 1.
Pentafluoroethane 20 ~ 65 % as to the Non - Azeotropic Regrigerant Mixtures, for a refrigerator, and the non azeotropic Non - Azeotropic Regrigerant Mixtures with 1 , 1 , 1 , 2 - tetrafluoroethane 30 ~ 75 % and C 3 hydrocarbon 5 ~ 15 %.

Claim 2.
As to the 1 term, C 3 hydrocarbon is the propane, a cyclopropane, and the non azeotropic refrigerant composition selected in the propylene middle than in other words.

Claim 3.
As to the refrigerating system, the refrigerating system using the refrigerant road and suction tube suction line heat exchanger the non azeotropic mixture as pen border fluoroethane 20 ~ 65 %, and 1 , 1 , 1 , 2 - tetrafluoroethane 30 ~ 75 % and C 3

hydrocarbon 5 ~ 15 %

Claim 4.

As to the 3 term, the refrigerating system in which C 3 hydrocarbon is selected in the propane, and the propylene middle or the interface furnace propane than.

* list of reference: it discloses with very first application contents.

Drawing.

Fig. 1

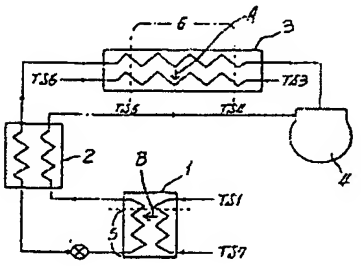
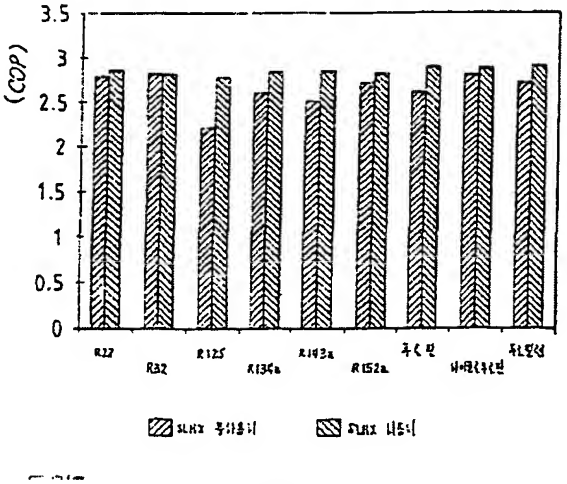
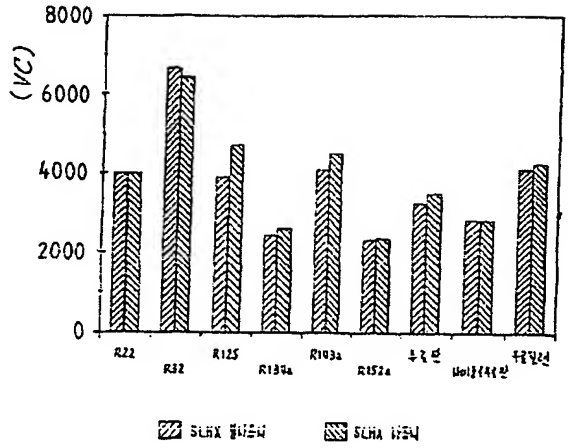


Fig.2



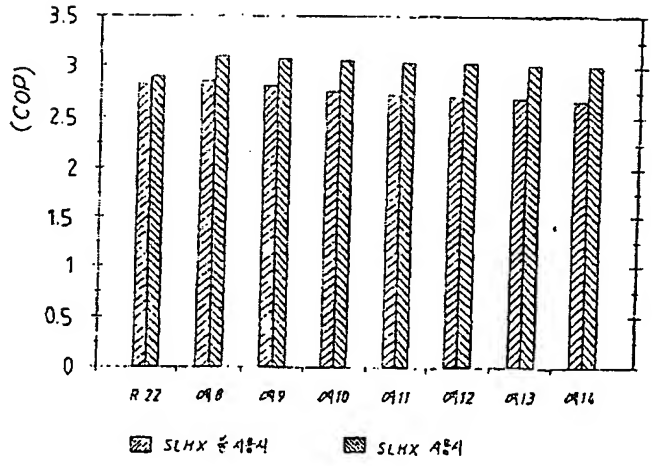
The SLHX not used time SLHX use time

Fig.3



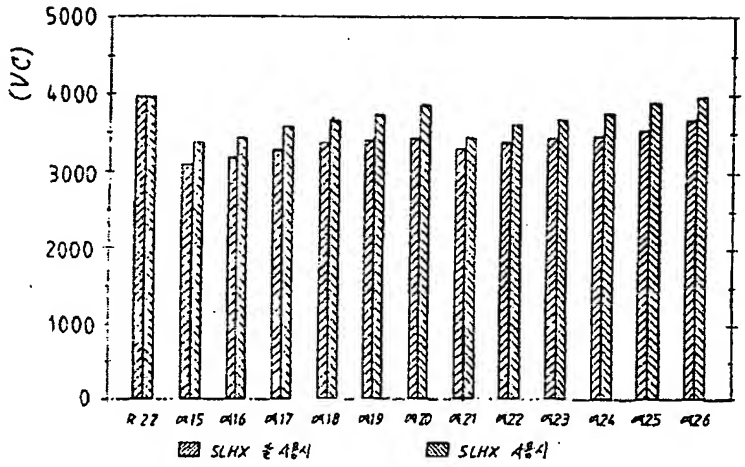
The SLHX not used time SLHX use time

Fig.5



The SLHX not used time SLHX use time

Fig.9



The SLHX not used time SLHX use time

Fig.10